CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

CURTIS L. FOSSUM, *Executive Officer*
(916) 574-1800 FAX (916) 574-1810
California Relay Service From TDD Phone **1-800-735-2929**
from Voice Phone **1-800-735-2922**

Contact Phone: **(916) 574-1890**
Contact FAX: **(916) 574-1885**

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT AND NOTICE OF PUBLIC SCOPING MEETING

SCH # 2011061085
CSLC Ref Files: EIR No. 758; R28310;
WO 6005.126; W 30184

Date: June 29, 2011

To: Public Agencies and Interested Parties

Project: **Central Coastal California Seismic Imaging Project (CCCSIP or Project)**. Pacific Gas and Electric (PG&E) proposes to conduct a high-energy offshore seismic survey to better characterize various fault zones in the vicinity of the Diablo Canyon Power Plant (DCPP), an electricity-generating nuclear power plant at Avila Beach, San Luis Obispo County. PG&E has been directed to conduct the survey by the California Energy Commission (CEC) pursuant to a report prepared to comply with Assembly Bill 1632 (Blakeslee, Chapter 722, Statutes of 2006). A detailed project description and potential environmental effects are presented in Attachment 1.

Applicant: Pacific Gas and Electric

Mr. Mark Krausse (PG&E)
Director, State Agency Relations
1415 L Street, Suite 280
Sacramento, CA 95814

Mr. Ray de Wit (PG&E's Agent)
Padre Associates, Inc.
1485 Enea Court, Bldg. G, Ste. 1480
Concord, CA 94520

Project Location:
The proposed CCCSIP will be conducted on the shoreline and within the nearshore and offshore (~400 meter depth) marine waters between Cambria and San Luis Bay, offshore San Luis Obispo County, California, traversing both State and federal waters.

Project Description:
The Project proposed by PG&E would implement the recommendations of the CEC and California Public Utilities Commission (CPUC) by conducting deep,[1] high-energy seismic surveys of the various fault zones, particularly the intersections of fault lines, in

[1] "Deep" means depths of 10 to 15 km, the depths required to identify and characterize active faults.

the vicinity of the DCPP. PG&E proposes to conduct the Project, which consists of the following components, between September 2012 and November 2012:

- Offshore High-Energy Seismic Survey – Conducting a high-energy offshore seismic survey in two zones, totaling approximately 830 square kilometers near Morro Bay. The survey will be conducted using a geophysical vessel, assisted by support/monitoring vessels, towing a series of sound-generating air guns and sound-recording hydrophones; and
- Nearshore Seismic Data Collection – Deploying a grid of nodal seafloor geophones in the near shore and tidal areas off of Point Buchon and Point San Luis to record onshore and offshore sound signals.

The California State Lands Commission (CSLC) will be the Lead Agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) because of PG&E's request for a geophysical survey permit from the CSLC. Due to the potential for the Project's proposed survey activities to result in a significant effect on the environment, CSLC staff has determined that preparation of an Environmental Impact Report (EIR) is required. The U.S. Army Corps of Engineers will conduct a separate analysis, pursuant to the National Environmental Policy Act (NEPA), that will include the portion of the Project in federal waters and address federal environmental permitting requirements.

Purpose of Public Scoping Process:
The purpose of this Notice of Preparation/Notice of Public Scoping Meeting is to obtain agency and the public's views as to the scope and content of the environmental information and analysis, including the significant environmental issues, reasonable range of alternatives, and mitigation measures that should be included in the EIR. Applicable agencies will need to use the EIR when considering related permits or other approvals for the Project.

Due to the time limits mandated by State law, written comments must be sent within 30 days and must be received or postmarked by Monday, **July 29, 2011.** Please send your comments at the earliest possible date to:

Jennifer DeLeon, Senior Environmental Scientist
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825
Phone: (916) 574-0748
FAX: (916) 574-1885
E-mail: Jennifer.Deleon@slc.ca.gov

NOTE: You are encouraged to submit electronic copies of your comments in Microsoft Word format. If comments are faxed or sent by e-mail, please also mail a copy to ensure that a clean copy is received by this office.

Pursuant to the State CEQA Guidelines, section 15082, subdivision (c)(1),[2] the CSLC will conduct two public scoping meetings for the proposed Project to receive oral or written testimony at the times and place listed below:

DATE: **Thursday, July 21, 2011**
TIME: 3:00 p.m. and 6:00 p.m.
LOCATION: San Luis Obispo City/County Library, Community Room
995 Palm Street
San Luis Obispo, California 93401-3218
Telephone: (805) 781-5991

A sign language interpreter will be provided upon advance notification of need by a hard-of-hearing person. Such notification should be made as soon as possible prior to date of the scoping meetings. If you need reasonable accommodation, to conduct business with the CSLC staff conducting the scoping meetings, for a disability as defined by the federal Americans with Disabilities Act and the California Fair Employment and Housing Act, please contact Jennifer DeLeon at (916) 574-0748 in advance of the scoping meetings to arrange for such accommodation.

If you have any questions or would like a copy of this Notice and Attachment 1, please contact Jennifer DeLeon at the above address, by phone (916) 574-0748, or e-mail at Jennifer.Deleon@slc.ca.gov. Copies of this Notice will also be available at the public scoping meetings and on the CSLC web page: www.slc.ca.gov (under the "Information" tab and "CEQA Updates" link).

Signature: _____ Date: _____
Jennifer DeLeon
Senior Environmental Scientist

[2] The "State CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

ATTACHMENT 1

PROJECT DESCRIPTION AND POTENTIAL ENVIRONMENTAL EFFECTS
Central Coastal California Seismic Imaging Project, San Luis Obispo County

1. PROJECT BACKGROUND

Pacific Gas and Electric's (PG&E) Diablo Canyon Power Plant (DCPP) is an electricity-generating nuclear power plant located on the central California coast in Avila Beach, San Luis Obispo County. In commercial operation since 1985, the DCPP is situated near several onshore and offshore fault zones, including the Hosgri, San Luis Bay, and recently-discovered Shoreline faults.

Assembly Bill (AB) 1632 (Blakeslee, Chapter 722, Statutes of 2006) required the California Energy Commission (CEC) to assess the potential vulnerability of California's two largest nuclear power plants, DCPP and the San Onofre Nuclear Generating Station (SONGS) operated by Southern California Edison, to aging or seismic activity. The CEC's 2008 final report (Report) recommended that PG&E perform, among other actions, three-dimensional (3-D) seismic reflection mapping to gather data on faults near the DCPP. The California Public Utilities Commission (CPUC) subsequently made its approval of PG&E's 2007 general rate case decision (Decision 07-03-044) contingent on the inclusion of seismic mapping in PG&E's DCPP license renewal feasibility study.

Several recent developments have also increased agency and public interest in a deeper seismic evaluation of the region surrounding DCPP and support for the prompt completion of a 3-D mapping project. In 2008, the U.S. Geological Survey (USGS), working cooperatively with PG&E, discovered a new fault zone (since named "Shoreline") offshore of DCPP. In 2009, the U.S. Nuclear Regulatory Commission (NRC) released Research Information Letter 09-001, which concluded that the design of DCPP could withstand movement from the Shoreline fault. In 2011, the partial meltdown of Japan's Fukushima Daiichi nuclear power plant occurred following a magnitude 9.0 earthquake and subsequent tsunami.

Pursuant to section 6826 of the Public Resources Code, the California State Lands Commission (CSLC) may grant permits to conduct geophysical surveys on State sovereign lands, including the State's tide and submerged lands, which extend from the shoreline out to three nautical miles offshore. The CSLC has issued geophysical survey permits in some form since 1945, most recently pursuant to a Mitigated Negative Declaration (MND) adopted by the CSLC in 1984 pursuant to the requirements of the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). At its October 7, 1987 meeting, however, mounting evidence of the potentially significant effects of "high-energy" survey equipment (greater than two kilojoules [kJ] of energy input) on marine fish (including eggs and larvae), mammals, and reptiles, both behaviorally and physiologically, prompted the CSLC to: distinguish between low- and high-energy surveys in its permitting; direct staff to issue, under its low-energy offshore geophysical permit program, permits for the use of equipment using no more than 2 kJ

of energy input; and approve the requirement that the issuance of any permit for surveys employing equipment above the 2 kJ of energy input threshold would require the preparation of an Environmental Impact Report (EIR).

2. PROJECT DESCRIPTION AND LOCATION

The Project proposed by PG&E would implement the recommendations of the CEC and CPUC by conducting deep, high-energy seismic surveys of the various fault zones, particularly the intersections of fault lines, in the vicinity of the DCPP, which is located in Avila Beach, west of San Luis Obispo, on the San Luis Obispo County coast. PG&E proposes to conduct the Project, which consists of an offshore survey and a nearshore survey, between September 2012 and November 2012.

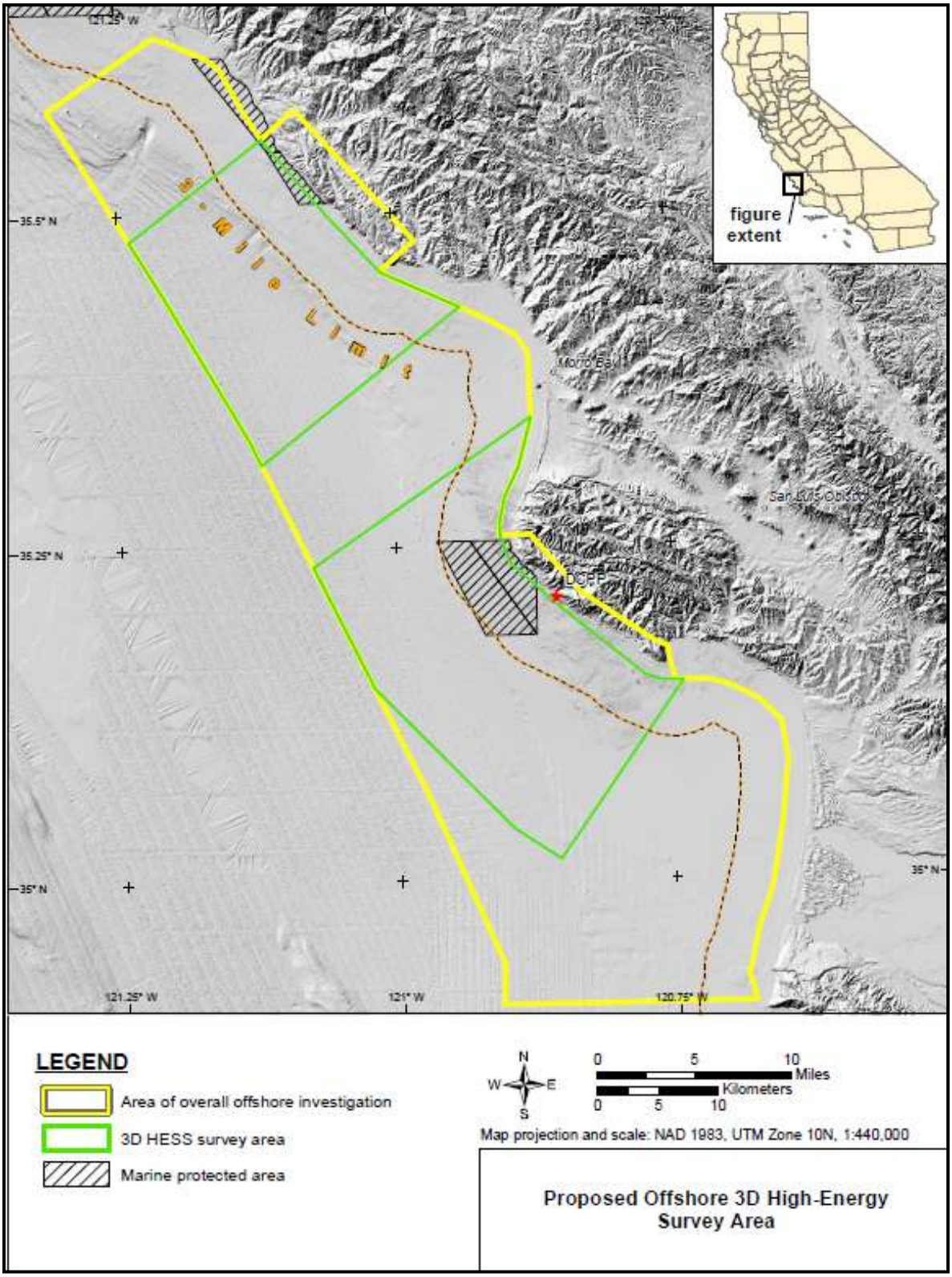
Offshore Survey Operations: The offshore survey will span both State and federal waters, and will encompass two primary target areas (see Figure 1):

- Zone 1, between Cambria and Point Estero, is approximately 345 square kilometers (km^2), and encompasses the intersection of the Hosgri and San Simeon fault zones. The survey area also contains part of the Cambria State Marine Conservation Area (SMCA).
- Zone 2, between Point Buchon and Point San Luis, is approximately 484 km^2 and covers two sub-target areas to be surveyed concurrently. Zone 2 also includes much of the Point Buchon SMCA and State Marine Reserve (SMR). Zone 2a (108 km^2) covers the intersection of the Hosgri and Shoreline fault zones offshore Point Buchon, while Zone 2b (117 km^2), offshore Point San Luis, will determine the southern boundary of the Shoreline fault zone as well as the geometry of offshore fault systems.

The proposed offshore seismic survey will be conducted with geophysical vessels specifically designed and built to conduct such surveys. In 30 to 305 meter (m) water depths, 6 to 12 streamers, each 4.0 to 8.0 km long will be towed behind the primary survey vessel. The streamers will contain hydrophones placed at 2 to 30 m intervals to maximize efficiency and minimize the number of source points while achieving overall Project objectives. The following outlines the general specifications for the geophysical survey vessel and the support vessels needed to complete the offshore survey:

- Primary vessel (60 to 100 m length): suited for work in shallow waters and obstructed areas, outfitted to deploy/retrieve hydrophone streamers and airgun arrays, air compressors for the airgun array, and survey recording and processing facilities;
- Secondary vessel (approximately 50 m length): would be used to deploy/retrieve seafloor geophones in the shallow water (0-20 m depth) zone; and
- Third vessel (approximately 15 m length): would act as a scout boat and support vessel for survey craft.

FIGURE 1. Project Vicinity Map – CCCSIP



Nearshore Survey Operations: The nearshore component of the Project will be located off of Point Buchon and Point San Luis, in water depths of approximately 30 to 40 m. To collect deep seismic data in water depths that are not accessible by survey vessel, either accelerated weight drop (AWD) or Vibroseis™ (a tired or tracked vehicle with a vibrating device), will be used to generate seismic signals from onshore. Areas where these onshore activities will occur are shown in Figure 1 as "indents" in the shoreward boundary of the investigation area.

Within these, seafloor devices, which record the onshore and offshore signals, will be deployed. A grid of nodal seafloor geophones (e.g. Fairfield Nodal Z700) will be laid in the near shore/tidal area off of Point Buchon and Point San Luis to provide additional cross line coverage, allowing construction of "dip lines" from the 3-D data acquisition. This seafloor equipment will be in place for the duration of the experiment (approximately one month, including deployment and demobilization).

A description of the two proposed sound sources are provided below.

- Accelerated Weight Drop (AWD) - Nitrogen spring AWD sources produce high energy output in a small package that can be mounted on tracked vehicles to reduce impact on the terrain. AWD utilizes a base plate that shields the ground from impact and reduces peak ground pressure (< 6 pounds per square inch [psi]) for use in environments that prohibit using conventional sources. AWD systems do not provide sufficient energy to image deeper than 4 to 6 km; thus AWD alone will not provide a signal that is sufficient to image crustal structure to depths of 10 to 15 km, as required to identify and characterize active faults. Consequently, it will also be necessary to use Vibroseis™ to achieve sufficient signal strength to meet the crustal imaging requirements.
- Vibroseis™ - Modern vibrators with improved feedback control electronics are the only non-explosive onshore seismic sources that provide sufficient energy to image to depths of up to 15 km. Vehicle-mounted vibrators are the proposed method of source generation and would be used to the greatest extent possible in accessible areas. Vibrators can only be used along portions of the profile routes with sufficiently wide roads and moderate grades.

3. PERMITS AND PERMITTING AGENCIES

In addition to action by the CSLC, as Lead Agency under CEQA, the proposed Project may require permits and approvals from reviewing authorities and regulatory agencies that may have oversight over aspects of the proposed Project activities, including:

Local and Regional
- County of San Luis Obispo
- San Luis Obispo County Air Pollution Control District (APCD)

State
- California Coastal Commission (CCC)

- California Department of Fish and Game (CDFG)
- Central Coast Regional Water Quality Control Board (CCRWQCB)
- State Historical Preservation Office (SHPO)
- California Department of Parks and Recreation (CDPR)

Federal

- National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NOAA Fisheries)
- U.S. Army Corps of Engineers (ACOE)
- U.S. Coast Guard (USCG)
- U.S. Fish and Wildlife Service (USFWS)

2. SCOPE OF THE EIR

Pursuant to the State CEQA Guidelines section 15060, the CSLC staff conducted a preliminary review of the proposed Project. Due to the potential for the Project's proposed survey activities to result in a significant effect on the environment, as well as the CSLC's 1987 discussion regarding high-energy offshore geophysical work, CSLC staff has determined that preparation of an EIR is required. A preliminary list of issues and alternatives to be discussed in the EIR is provided below. Additional issues and/or alternatives may be identified at the public scoping meeting, and in written comments, as part of the EIR process. The CSLC invites comments and suggestions on the following potentially significant effects proposed for discussion in the EIR.

The CSLC generally uses the following designations when examining the potential for impacts according to CEQA issue areas:

> **Potentially Significant Impact:** Any impact that could be significant, and for which no mitigation has been identified or implemented.
>
> **Less-Than-Significant Impact with Mitigation Incorporated:** Any impact that could be significant, but which requires mitigation to reduce the impact to a less-than-significant level. Impacts in this category are otherwise considered potentially significant impacts, but ones for which mitigation measures have been designed and would be enforced in order to reduce said impacts to below applicable significance thresholds.
>
> **Less-Than-Significant Impact:** Any impact would not be considered significant under CEQA relative to the applicable significance threshold.
>
> **No Impact:** The Project would not result in any impact to the resource area considered.
>
> **Beneficial Impact:** The Project would provide an improvement to an issue area in comparison to the baseline information.

The estimations of impact levels used for this Notice of Preparation are based solely on preliminary documents and do not preclude findings of significance that would be made

during the preparation of the EIR, including findings that could change the significance of an impact and how it would need to be addressed within the EIR.

2.1 Currently Identified Potential Environmental Impacts

Based on initial internal scoping, the Project is not anticipated to impact the following resource areas, which could therefore be eliminated from consideration in the EIR:

- Aesthetics
- Agriculture and Forestry Resources
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Utilities and Service Systems

The following provides information on the currently identified issues that may have potentially significant environmental effects.

2.1.1 Air Quality and Greenhouse Gas (GHG) Emissions

The EIR will analyze potential impacts to air quality from vessel and vehicle operations. The Project is expected to only result in short-term generation of criteria air pollutants and GHG emissions associated with deployment of equipment, the actual surveys, and demobilization. Since the Project site is located in an area regulated by the San Luis Obispo County APCD, the EIR will evaluate emissions estimates against applicable significance criteria in accordance with APCD Guidelines. Estimated Project emissions would also need to demonstrate General Conformity and conformance with the State Implementation Plan.

2.1.2 Biological Resources

Two Marine Protected Areas (MPAs), Point Buchon and Cambria/White Rock, are within the Project region. Each has two different area designations (the inshore SMR and the offshore SMCA) which have specific restrictions on extractive activities, including the taking of marine life, as identified in the State Marine Life Protection Act (Fish & G. Code §§ 2850-2863) and its implementing regulations. The EIR will examine the Project's potential impacts on sensitive protected resources in these areas particularly, and discuss the statutes and regulations governing activities in the MPAs.

Other sensitive habitats in the shorezone offshore San Luis Obispo County include rocky intertidal and subtidal habitats, kelp beds and surfgrass (*Phyllospadix* spp.), an important habitat for invertebrates and fish. Among the species potentially present in these habitats is the federally-endangered black abalone (*Haliotis cracherodii*).

The Project area supports important habitat for seabirds, sea otters and sea lions, and cetaceans (whales, dolphins and porpoises). In addition to the diverse habitats of the

Morro Bay estuary and surrounding lands, specific areas of importance include nesting areas for seabirds (including black oystercatchers [*Haematopus bachmani*], cormorants [*Phalacrocorax* spp.], and pigeon guillemots [*Cepphus columba*]) along Point Buchon and foraging habitat for shorebirds, including the threatened western snowy plover (*Charadrius alexandrinus nivosus*), along Sandspit Beach south of the entrance to Morro Bay harbor. Estero Bay is also a foraging ground for marine mammals, and pinnipeds use nearby beaches and rocky shoreline to haul-out throughout the year. Cetaceans that may be encountered in nearshore areas include bottlenose and common dolphins (*Tursiops truncatus* and *Delphinus delphis*, respectively), humpback whales (*Megaptera novaeangliae*) and Minke whales (*Balaenoptera acutorostrata*) during summer and fall, and gray whales (*Eschrichtius robustus*) during the spring and winter migration periods. Gray whales are most common from December to May, being most abundant in January during the southward migration, and in March during the northward migration; they also tend to come relatively close to Point Buchon. Special-status fish species that occur in the Project area include bocaccio (*Sebastes paucispinis*), a rockfish, and green sturgeon (*Acipenser medirostris*). Other species of rockfish (yelloweye and cowcod [*S. ruberrimus* and *S. levis*, respectively]), both adults and larvae, lingcod (*Ophiodon elongatus*), cabezon (*Scorpaenichthys marmoratus*), market squid (*Loligo opalescens*), hagfish (*Eptatretus stouti*), rock and Dungeness crabs, and numerous other fish and marine invertebrates are present at various water depths and on various substrates in the Project area.

The Project description includes a number of measures proposed by PG&E to avoid or reduce the Project's potential impacts. PG&E proposes developing a Marine Wildlife Contingency Plan (MWCP) to minimize the risk of survey vessel collisions with marine megafauna. The MWCP will include measures such as:

- Station marine mammal observers (MMOs) on the primary survey vessel;
- Deploy a scout vessel with MMOs to monitor marine wildlife within the survey exclusion zone;
- Conduct aircraft-based monitoring of larger safety area, if necessary;
- Employ power up, ramp up, and shutdown procedures for air gun operations; and
- Use a mitigation air gun during survey turns outside of the 3-D survey area.

The EIR will analyze the Project's potential to injure or kill marine wildlife through collisions, as well as examine the adequacy of PG&E's proposed MWCP and use of MMOs as mitigation.

Before placing seafloor geophones, diver-biologists will survey for black abalone and, if any are discovered, realign the proposed layout to avoid them. Placement of seafloor geophones in the nearshore areas off Point Buchon and Point San Luis, however, may still cause physical disturbance to sensitive nearshore habitat and associated species. The EIR will assess the type and extent of habitats that may be disturbed in the Project area and, if impacts are found to be significant, identify feasible mitigation.

Because the generation of high-energy underwater noise is central to Project operations, the EIR will include a thorough analysis of the survey's potential impacts on marine mammals, reptiles, seabirds, and fish and invertebrates, including eggs and larvae. High-energy sound waves produced by air-guns may impact or injure marine species through masking conspecific and interspecific sounds, inducing behavioral changes, and causing auditory and non-auditory impairment and injury. Fish with air bladders, immobile eggs and larvae, diving birds and marine mammals dependent on auditory communication are of particular concern. Special attention will be paid to special-status fauna, animals subject to the Marine Mammal Protection Act, and species important to the health of commercial and recreational fisheries (socioeconomic effects related to fisheries will be analyzed in the Socioeconomics and Environmental Justice section of the EIR). This analysis will incorporate modeling of underwater sound attenuation specific to the Project's equipment and route, as well as the bioacoustic ranges and vulnerabilities of the species that may occur in the Project area.

Onshore, although the sound-source vehicles will stay on existing roads, noise and vibrations from the operation of the AWD and Vibroseis™ systems may disturb terrestrial fauna, marine organisms in shallower water, and nesting or feeding seabirds. The EIR will examine the potential effects of these on- and nearshore activities.

Both direct and indirect impacts from the proposed Project on biological resources will be assessed in the EIR. The potential impact of proposed Project activities on federally or state-listed species or species proposed for listing will be addressed in the EIR, in consultation with the CDFG, NOAA Fisheries and USFWS.

2.1.3 Cultural Resources

The EIR will evaluate impacts to any reported prehistoric habitation sites in the Project area. Preliminary research has identified one recorded underwater site located at Avila Beach (Port San Luis). The Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) marine archaeological studies and databases also indicate that a small offshore area centered on the north side of Morro Bay is considered sensitive for historic shipwrecks. The location of one wreck has been established about 3.7 km (2.3 mi) north of the Montaña del Oro State Park; the locations of four other historically-significant shipwrecks (*Challenge*, *Golden Gate*, *Lena* and *Otsego*) are not known with any certainty. One more recent shipwreck, the *Vienni Su* (1945) has also been reported north of Point Buchon. Additional research conducted for previously-completed projects within the area indicates that three early 20th century shipwrecks (*The Eclipse*, a schooner; *The Yellowtail*, a motor vessel; and *The New Sunset*, an oil screw), none of which have been evaluated for importance as cultural resources, and one recent shipwreck (*The Hi C*) are reported possibly within the Project area.

Based on initial information about the Project submitted by PG&E or otherwise in the possession of the CSLC, staff does not anticipate that offshore survey activities will affect offshore cultural resources such as shipwrecks; however, the EIR will describe nearby offshore resources and evaluate the Project's potential disturbance of those

resources. The EIR will also identify nearby onshore cultural resources, as well as their potential sensitivity and proximity to the Project's nearshore and onshore activities. Onshore cultural resources have been relatively well documented. An important onshore site is the SLO-2 site located around Diablo Creek, north of the DCPP. Documented sensitive resources will be avoided or mitigated in accordance with existing regulations in consultation with the SHPO, local Tribes and the CSLC.

2.1.4 Geology and Soils

The Project purpose is to better document faults in the region. The EIR will characterize the nearshore and offshore geology of the Project area and will analyze the potential for significant or long-term impacts. CSLC staff does not anticipate that the Project will have significant impacts on soils.

2.1.5 Public Health and Safety / Hazards and Hazardous Materials.

Marine vessel traffic and safety concerns will be discussed in this section of the EIR. Potential public health related hazards include the potential for accidental discharges from collisions with other vessels. Similar impacts may result from the vehicles employed for the nearshore survey. The Noise section of the EIR will evaluate noise disturbances to humans caused by on-shore survey activities

2.1.6 Hydrology and Water Quality

Nearshore water quality is influenced by a number of factors, including local currents, nearby ocean outfalls and discharges, and freshwater inflow. Petroleum development activities, commercial vessel traffic, natural hydrocarbon seeps, river runoff, municipal wastewater outfalls, and industrial outfalls all contribute to increased levels of nutrients, trace metals and synthetic organic contaminants in offshore waters. The largest municipal outfall in the Project region is located approximately two miles north of Morro Rock, in the southern portion of Estero Bay and serves the combined communities of Morro Bay and Cayucos. Compared to coastal waters of the Southern California Bight, however, anthropogenic (human-induced) inputs into the water of the Santa Maria Basin, including Estero Bay and the Project area, are fewer and, therefore, these marine waters are considered relatively clean.

Nearshore ocean temperatures along the California coast north of Point Conception are largely influenced by the California and Davidson currents and the seasonal upwelling of deeper ocean water. The winds promote the offshore movement of the surface water mass and its subsequent replacement by the upwelling of cold, nutrient rich water from deeper layers. Seasonal upwelling plays an important role in temperature and nutrient cycling within the bay and along the entire coast of California. Upwelling is not, however, restricted temporally, and can occur at any time during the year when the appropriate wind conditions persist.

The operation of survey and support vessels could result in accidental releases of hazardous materials into the water. The potential also exists for accidental discharges from collisions with other vessels. The EIR will discuss the need for an Oil Spill Contingency Plan (OSCP) and best management practices (BMPs) to prevent degradation of water quality.

Depending on the characteristics of the substrate in locations slated for geophone placement, equipment deployment could also result in temporary increases in turbidity. In consideration of these risks, the EIR will address potential impacts associated with survey vessels and vehicles and seafloor geophone placement.

2.1.7 Noise

The EIR will examine the Project's potential noise impacts, both from onshore and offshore noise sources, on human recreators, such as divers and beachgoers, workers, and residents. An Onshore Noise and Vibration Plan will be included and evaluated in the EIR. Impacts of underwater noise on marine life will be analyzed in Biological Resources section of the EIR.

2.1.8 Recreation

Offshore recreation within the Project area consists of surfing, boating, kayaking and fishing, among other water sports, and the marine waters also provide opportunities for whale watching. The EIR will characterize the types and intensity of recreation in the Project area, both nearshore (e.g., beachgoing, surfing) and offshore at the time of year the Project is proposed to take place, then analyze the Project's potential to interfere with or interrupt these activities. No long-term impacts are expected to occur to recreational activities.

2.1.9 Transportation / Traffic

The Project's survey times and transects may come into conflict with existing commercial and recreational vessel traffic in the Project area. Possible mitigation for increase of or interference with vessel traffic could include early notification to local agencies, harbormasters and fishing organizations, as required for surveys conducted under a CSLC low-energy geophysical survey permit.

2.2 SPECIAL IMPACT AREAS

2.2.1 Cumulative Impacts

The CEQA requires an EIR to discuss the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable." (State CEQA Guidelines § 15130) A cumulative impact is an impact which is created through a combination of the project being analyzed in an EIR and other projects in the area causing related impacts. The EIR will define the geographic scope of the area affected by cumulative effects

("Cumulative Projects Study Area"), evaluate the cumulative impacts of the related projects, and identify, if appropriate, feasible measures to mitigate or avoid the Project's contribution to cumulative effects. The Cumulative Projects Study Area is presently defined as proposed and approved projects in the nearshore and offshore marine waters between Cambria and Point San Luis. The EIR will discuss the cumulative impacts of the proposed Project, in conjunction with other approved and reasonably foreseeable projects in the general area.

2.2.2 Growth-Inducing Impacts

The CEQA requires a discussion of the ways in which a proposed project could foster economic or population growth, including the construction of additional housing, in the vicinity of the project. The State CEQA Guidelines (§ 15126.2, subd. (d)) consider a project to be growth-inducing if it fosters or removes obstacles to economic or population growth, provides new employment, extends access or services, taxes existing services, or causes development elsewhere. The EIR will contain a discussion of the potential growth-inducing impacts of the proposed Project.

2.2.3 Socioeconomics and Environmental Justice

The CSLC developed and adopted an Environmental Justice Policy in 2002 to ensure equity and fairness in its own processes and procedures. This Policy stresses equitable treatment of all members of the public and commits to consider environmental justice in its processes, decision-making, and regulatory affairs which is implemented, in part, through identification of, and communication with, relevant populations that could be adversely and disproportionately impacted by CSLC projects or programs, and by ensuring that a range of reasonable alternatives is identified that would minimize or eliminate environmental impacts affecting such populations.

Commercial fishing vessels use the Project area from the two major harbors: Morro Bay and Port San Luis. Hook and line, trap, net (set, drift and seine), and trawl are the four most commonly-used commercial gear types within the Project area. Based on CDFG's catch data, nearshore (within 60 km of the shoreline) fisheries tend to concentrate on market squid (seine), hagfish (trap), Cabezon (hook and line and trap), and Dungeness and rock crabs (trap). Further offshore, sablefish and thornyhead rockfish (trap and hook and line) are caught year-round, and seasonal catches of salmon (troll) and thresher shark (drift net) are common. Recreational fishing, including commercial passenger fishing vessels from the two major harbors, tend to stay within three miles of the shoreline and target species, such as rockfish, lingcod and Cabezon, associated with rocky habitat. Seasonal open-water trolling for albacore and salmon occurs further offshore, and fishers target California halibut and other flatfish in nearshore sedimentary habitats.

This section of the EIR will make a determination of the consistency of the proposed Project with the CSLC Environmental Justice Policy, and analyze the distributional patterns of high-minority and low-income populations on a regional basis. The analysis

will focus on whether the proposed Project would have the potential to affect area(s) of high-minority population(s) and low-income communities disproportionately. Survey noise, as well as traffic from survey vessels, may also affect commercial and recreational fishermen's catch rate during and immediately after the survey. The EIR will evaluate effects on local commercial, recreational and subsistence fishing activities. The analysis will include a characterization of the commercial fishing community and consider catch data, important fishing areas, and current closures.

2.3 ALTERNATIVES

2.3.1 EIR Alternatives Analysis

In accordance with the State CEQA Guidelines section 15126.6, an EIR must "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." The State CEQA Guidelines also require that a "no project" alternative be evaluated, and that under specific circumstances, an environmentally superior alternative be designated from among the remaining alternatives.

The development of this portion of the EIR will use an alternative screening analysis which will: evaluate a reasonable range of alternatives; provide the basis for selecting alternatives that are feasible; reduce significant impacts associated with the proposed Project; and provide a detailed explanation of why any alternatives were rejected from further analysis.

In addition to the "no project" alternative, alternatives may be developed and included in the EIR based on information received during the public scoping and as a result of the environmental analysis. Examples of possible alternatives to be evaluated include surveys conducted at a different time of the year, surveys employing different high-energy equipment, survey programs that call for firing air guns less frequently, further low-energy seismic surveys, and surveys that continue after sunset.

2.3.2 No Project Alternative

Under the "no project" alternative, neither the nearshore nor offshore survey component would occur, and the seismological information to be gained by the proposed Project would not inform discussion of the DCPP's relicensing process or any modifications or improvements to the DCPP proposed as part of its relicensing. PG&E would be unable to fully comply with the CPUC's Decision 07-03-044. The seismological profiling and imaging data, to be made public under the proposed Project, would not be available to the scientific community for future research or environmental analyses in the area.